Proposal for a Statewide Water Analysis Network

Last Meeting!

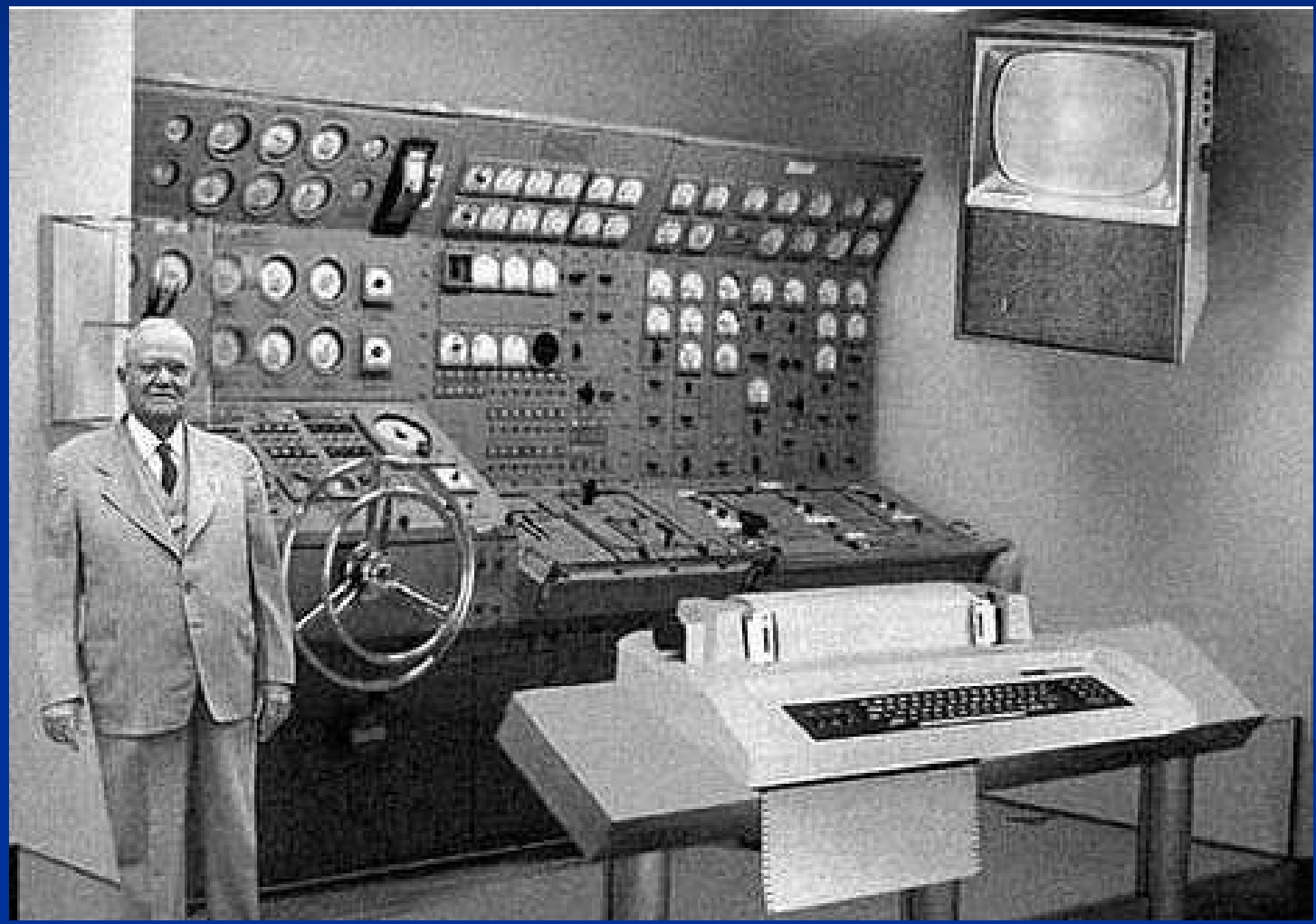
Update 2005

December 9, 2005

Presentation Topics

- Improving Water Plan analysis
- Where we want to be
- DWR's strategy
- SWAN proposal

Improving Water Plan Analysis



Identified Limitations In Water Plan Analysis

- No broad acceptance of prior analytical procedures
- Need detailed quantitative information about the costs, benefits, and broad social, environmental, and economic tradeoffs
- Data, analytical tool development, and data management have not kept pace
- Lack a consistent framework and standards for collecting, managing, and accessing data

Specific Problem Areas

- Data, data, data
- Water flow and operations models
- Future water use forecasts
- Scenarios
- Consumptive vs. non-consumptive use
- Economic efficiency
- Hydrologic variability
- Water quality
- Planning objectives
- Groundwater management
- Transparency

Where We Want To Be

Multiple Quantitative Views

- ***Water Portfolios***
  - Describe where water originates, where it flows, and what it is used for based on recent data
- ***Future Baseline Scenarios***
  - Describe expected changes by 2030 if water managers do not take additional action
- ***Alternative Response Packages***
  - Describe packages of promising actions, predict expected outcomes, and compare performance under each scenario

Analysis in Phases

Update 2005

- Water portfolios of current conditions
- Describe quantitative approach
- Illustrate part of the approach – future scenarios

Future Updates

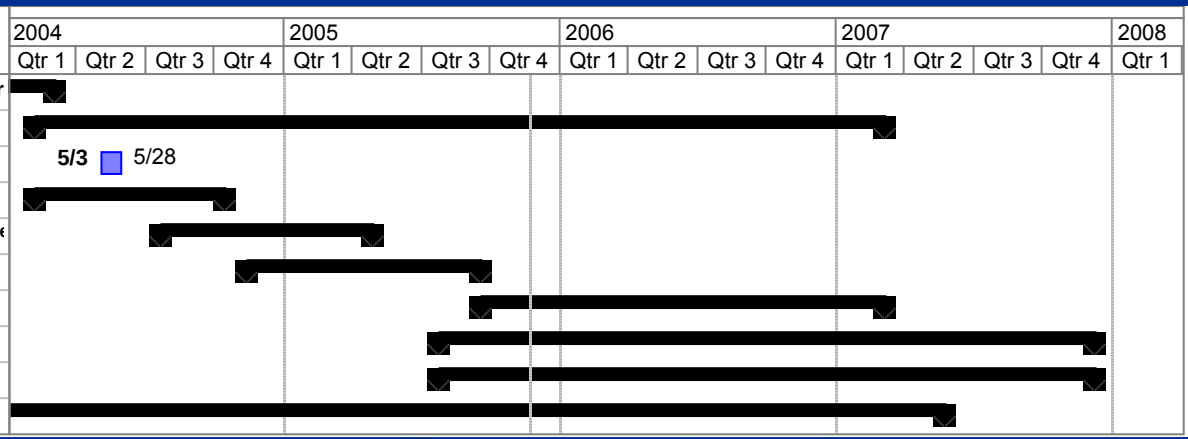
- Refine quantitative approach
- Refine future scenarios
- Quantify response packages
- Compare performance

The Point

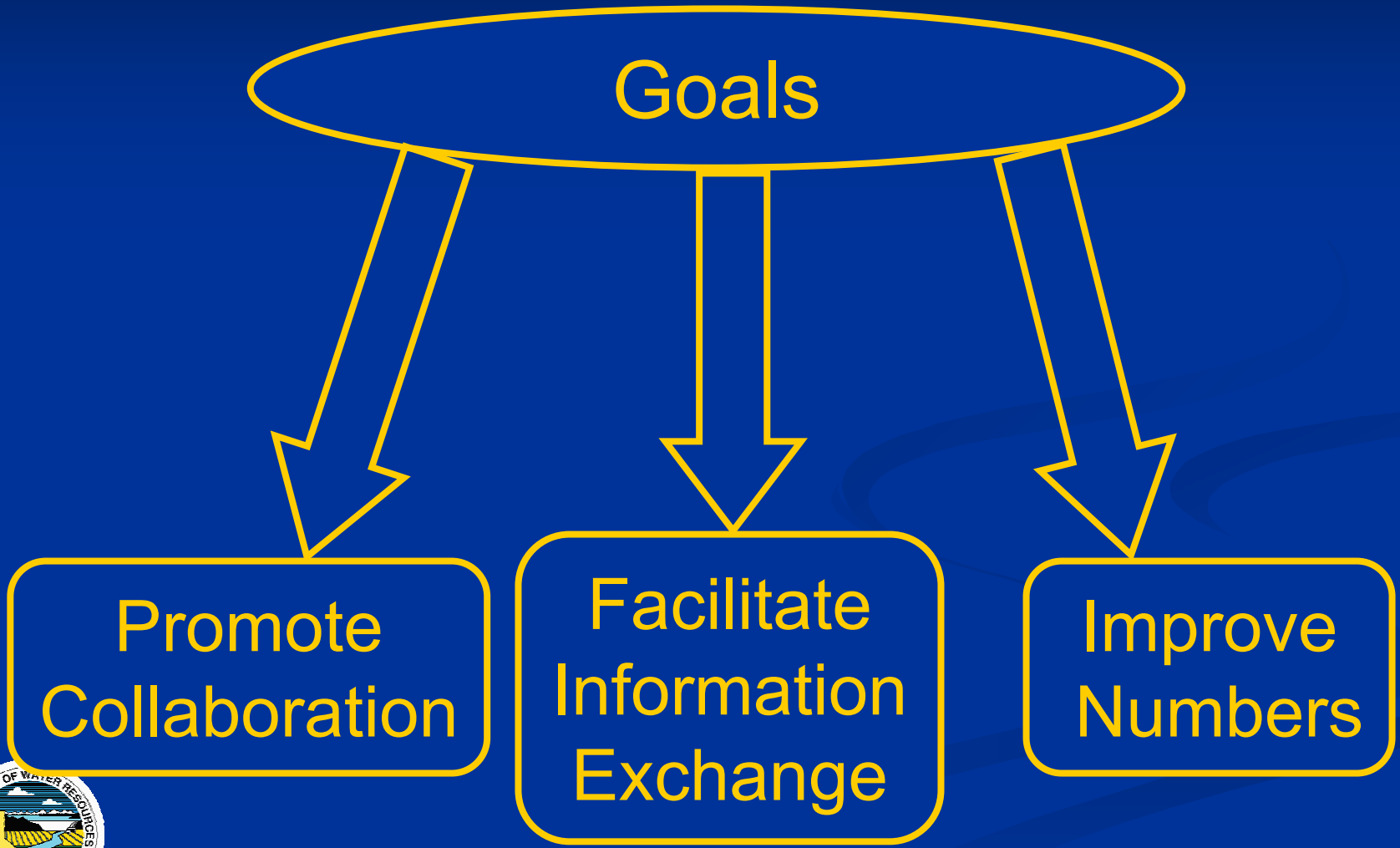
- Multiple views of water management system will:
  - Help inform policy discussions
  - Promote rational decisions regarding investments to meet objectives
  - Support regional planning
  - Support statewide planning

DWR's Strategy

ID	Task Name
1	**Analytical Tools and Data Tasks for Phase 1 of CWP (Resour**
14	**Analytical Tools and Data Tasks for Phase 2 of CWP**
15	Revise Analytical Tools workplan based on CWP Phase 1 comments
16	**Develop Conceptual Model**
27	**Develop Theoretical Models for Short-term and Long-term Approache**
36	**Develop short-term approach (workshops as needed)**
43	**Develop long-term approach**
51	**Analytical Tools Tasks for Phase 3 of CWP**
52	**Conduct analysis for CWP Update 2008**
60	**Develop Water PI and Water Data Library to Assist Regional Planning**



Next Steps for Quantitative Information



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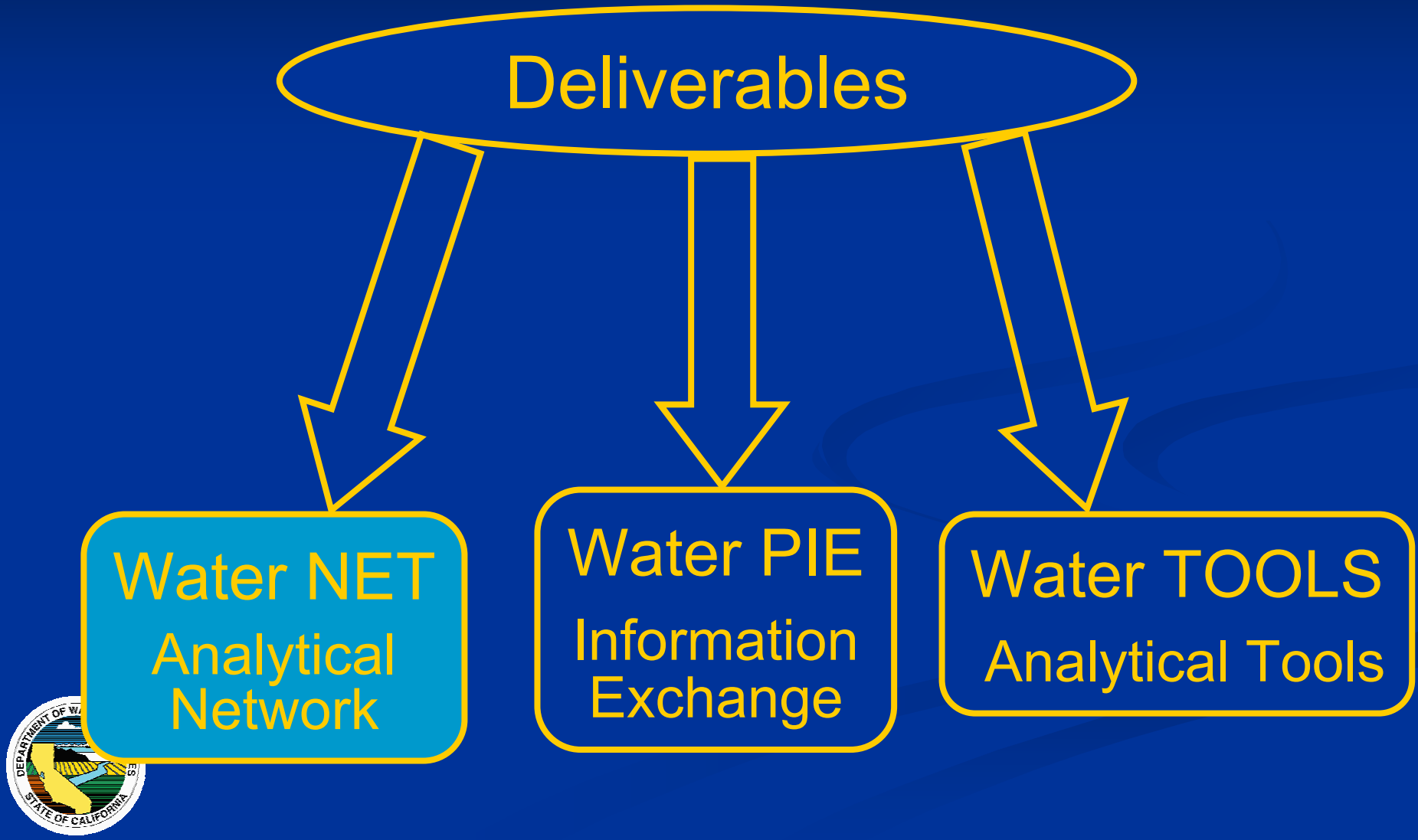

Statewide Water Analysis Network

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Why a Network?

- Problems identified for Water Plan are not unique
- Solution requires better integration and consistency at federal, state, regional, and local scales
- Difficult to reach consensus on specifics
- Expertise and funding are diffuse

How a Network Can Help the Water Plan

- Describe conceptual design of critical components
- Identify appropriate scales for water plan analysis
- Provide options for making water plan analysis transparent
- Develop guidelines for integrating information

November 22 workshop

- Attended by over 20 experts in data management and analytical tools
- Representatives of federal, State, local agencies, nongovernmental and academic organizations
- Discussed SWAN concept
- Reviewed work and findings by CWEMF from Strategic Analysis Framework report (September 2005)

Key Workshop Outcomes

- Participants generally agreed that California could benefit from SWAN
- Recommended DWR convene a specific project of limited scope to test
- Recommended that initial participation be ad hoc
- Decide later if necessary to formalize
- Report back to stakeholder groups

3 Proposed objectives

- Conduct pilot project to integrate UWMPs with Water Plan
- Develop common physical schematic of California's water management system
- Develop conceptual description of water demands

Potential Participation

Federal	Bureau of Reclamation, Geologic Survey, Army Corps of Engineers, Fish and Wildlife Service, Environmental Protection Agency
State	Water Resources, State Water Resources Control Board, Regional Water Quality Control Boards, Fish and Game, Energy Commission, Public Utilities Commission
Local	Metropolitan Water District of Southern California, Kern County Water Agency
Universities	UC Davis, UC Santa Barbara
Nongovernmental Organizations	California Water and Environmental Modeling Forum, Natural Heritage Institute, RAND Corporation, Environmental Defense
California Native Tribes	TBD

Reference Information

- http://www.waterplan.water.ca.gov/tools/swan.cfm
  - Recommended Next Steps ...
  - Quantified Scenarios of 2030 Water Demand…
  - Improving Analytical Procedures …
  - Future Quantitative Analysis…
- Chapter 4, Volume 1, Update 2005 (soon)
- http://www.cwemf.org
  - Strategic Analysis Framework …